

market until 1856, when a guano called Ichaboe, of a different color and texture, was imported—from what place, we cannot say.

Professor Samuel W. Johnson, in his report to the Connecticut State Agricultural Society in 1857, says that this bogus article was offered at \$10 per ton, and had a very impromising appearance, being mixed with much coarse sand and gravel, as well as feathers. A sample which he procured of the agent, A. Longfellow, of Cliff street, contained no less than 66 per cent of sand and matter insoluble in acid (and consequently worthless as manure), and was worth to the farmer only \$15 per ton.

Next in order to the Ichaboe, came Patagonian guano, the quality of which was inferior to Peruvian, owing to a very large admixture of sand, as well as to the leaching and evaporation of the nitrogenous portions by the alternate heavy rains and heats to which it had been exposed. Such of it as came to this port was very full of feathers, but was reckoned a good guano. The last cargo was weighed at the Atlantic Docks, eight or nine years ago; but last year two or three cargoes of bogus Patagonian were imported, which, after remaining a long time in store, finally found a purchaser in a Baltimore "manipulator," and went South to be mixed with a small proportion of genuine Peruvian, and sold as the real article. One cargo was mixed in a private warehouse in the Atlantic Docks, in this fraudulent manner, and has found a market. From a recent article in *The Journal of the American Geographical and Statistical Society*, we learn that, up to 1855, there had been taken to England 73,485 tons of Patagonian guano.

More recently than the Patagonian a phosphate guano has been imported into this country from the Caribbean Sea under the name of "Sombrero Guano," and quite a large quantity has been thrown into markets. This substance occurs in the form of a hardened deposit (not crystalline like the phosphorite of New-Jersey and Estramadura, but like hard-baked pie-clay), on an island in lat. 18° 38' N., in 63° 30' E., midway between Anguilla and the Virgin Islands. The color of the "Sombrero" is very different from that of Peruvian or other unpeeled being a light drab so that it would seem a poor article to mix with Peruvian with intent to defraud. Various eminent chemists have pronounced it remarkably rich in phosphoric acid, is union with lime generally placing it as high as 80 per cent. Its peculiar mechanical texture is such that it would seem capable of speedy solution in the soil, and hence of rapid appropriation by the plant. Whether such is really the case we cannot say, for the guano has only been in market three years. It meets with peculiar favor with the large Southern firms, who mix Peruvian with phosphoric guano, and honestly sell the compound under its proper name. Since the island came into American possession, three years ago, the demand in this country for its guano de-pot has risen from 2,800 tons the first year to 20,000 the present year; and it is quite improbable that any more than this quantity could be annually supplied, because of there being no harbors and only two anchorages at buoys a fourth of a mile from shore. We learn that the force employed in mining and shipping the guano consists of 20 white men, 200 free negroes, and about a dozen foremen, under the direction of a superintendent and assistant. A chemist is also resident upon the island, employed to analyze all the guano shipped, and send some which do not contain 70 per cent. of phosphate of lime. Lieutenant Knox, formerly of the U. S. Navy, but now assistant superintendent at the island, has estimated its cubic contents of guano at 3,493,000 tons. The process of quarrying and blasting with gunpowder has to be resorted to to get out the guano and in lump it is brought to this country, when it is ground in a suitable mill before it is fit for use. The phosphate of lime should prove to be as soluble as it is claimed to be, this guano is a real acquisition; but whether it be so or not, time alone can demonstrate.

The "Swan Island" guano, of which some few cargoes have been imported, is found on an island in the Caribbean Sea, in lat. 17° N., lon. 83° W. It is, we believe, of a crystalline nature, and quite like stone. Of its agricultural value we cannot speak understandingly, for we have not seen it tested, nor known of successful trials. It is of the same texture as the phosphorite of Hurstford, N. J., it cannot be highly esteemed, for, however much phosphate of lime it may contain, in the fact that it is in a crystalline form, like quartz rock, makes it insoluble and practically worthless. There are some chemists who assert that these rock guanos and phosphates may be rendered soluble and valuable as manure by treating them with sulphuric acid; but, we must say, we have little faith in the assertion. It is said that much of this and other rock guano has been mixed by private persons in the Atlantic states with intent to defraud. One man who owned a crushing mill bought the rock in lumps as it came, crushed it to the requisite fineness, and then treated it in this manner. He spread a thick layer of it on the floor, sprinkled a small proportion of genuine Peruvian over it, and mixed the two thoroughly together; then another layer and another dose of Peruvian were added, and so on. It is thought that during the past two years he thus mixed nearly or quite 3,000 tons, selling it as genuine Peruvian, and of course made a very large profit.

Another of these "manipulators" at Baltimore is said to have realized \$30,000 in one year. The amount of swindling in guano which is practiced is perfectly astounding, and really we are at a loss to know how it can be prevented. The guano sent from the Clinches by the Peruvian Government to their agents at New-York and Baltimore is sold at such prices that dealers can make very little profit on it. The demand for the article being so great, an almost irresistible temptation is offered to be dishonest, since an addition of fifty or seventy-five per cent. of yellow loam of a proper color and consistency, or of cheap phosphatic guano, cannot be discovered except by chemical analysis. Let a man establish a business of say two thousand tons per annum, he very soon sees that by the use of loam or rock guano, he could make \$40,000 or \$50,000 a year, while by an honest course he could make only \$3,000 or \$4,000, and in too many cases execution of the fraud follows swiftly after its conception.

The Peruvian Government had only three guano agents in this country since the article was introduced, viz.: Messrs. George & Bro. of Baltimore, Barreiro Bros., and Barril Bros.—the latter of whom are now acting. The exclusive right of digging and shipping guano for the term of nine years was sold to the Peruvian and Bolivian Governments, in 1840 or '41, for \$10,000; but the contract was soon after repudiated by the former, as the increasing demand for the article developed the immense value of the deposit. A high fixed tariff was established so soon as they got the monopoly into their own hands, which has been modified at various times. At present, it is stated as follows, in an official list which was obtained from the agents:

PRICES OF PERUVIAN GUANO.	
From 1 to 5 tons.....	\$82 1
From 5 to 10 tons.....	86 0
From 10 to 20 tons.....	82 3
From 20 to 30 tons.....	61
From 30 to 50 tons.....	60
From 50 to 200 tons.....	60, less 1 per cent.
From 200 to 500 tons.....	60, less 1 per cent.
From 500 to 1,000 tons.....	60, less 1 per cent.

Let our readers carefully mark these prices and remember them, for they will then be able to judge in some degree of the genuineness of samples offered them this season. The Government agents of course wish to do a wholesale business, and therefore discourage the purchase of lots of less than 50 tons, by charging a high price. It therefore fails to large private houses to supply the trade, by laying in lots of 1,100 tons at \$60, and selling from one ton upward at a small advance. One large firm in New-York, and one in Brooklyn, dispose in this way of nearly all the guano brought to this market; and although their profit in detail is very small, yet in the aggregate it is something handsome. With the best lots in the above list, the retail dealer, who buys in lots of 50 tons—and few buy more at a time—pays for his genuine guano as follows:

Cost per ton, of 2,240 pounds, at the Government stores in
Brooklyn, cash..... \$60 per ton
Cast to New-York, per ton..... 100
Boarding stores..... 12

Total \$82 1
—and to this must be added something more for storage, interest and insurance. And yet we have found no difficulty in getting any amount from one ton to one hundred, or more, offered to us for less money. For instance, William Morrison of No. 25 Fulton street, will sell us a single ton (of 2,240 pounds) for \$61; and from ten to fifty tons and upward for \$60, giving us three or four months to pay the bill! A. Longfellow of No. 34 Cliff street (the person referred to by Professor Johnson as agent for Ichaboe guano), offers us best Peruvian in lots of ten tons for \$60, the "long" ton of 2,240 pounds, charging 50 cents extra for carriage. John Moore of No. 193 Front street, will sell the "short" ton (2,000 pounds) at \$56, and give 30 days' time. John McNally of Nos. 195 and 197 Water street, offered us the single short ton for \$56 and the long ton, of 2,240 pounds, for \$61, delivered at a railroad depot in the city; and there may be other generous souls who would make even better terms. Let farmers draw their own conclusions. If they wish to satisfy themselves as to the nature and extent of the guano adulterations practiced here, let them go over to Brooklyn by the Fulton Ferry, follow along the shore, and look into the various guano storage houses between Fulton Ferry and the Atlantic Docks. In the docks and in various warehouses along shore, all the guano imported by the Peruvian Government is weighed and stored, and all or nearly all the "manipulators" (or adulterators) of guano cluster naturally about their premises. A certain quantity of genuine Peruvian is purchased and transported on trucks or carts directly to their stores, and two or three times its bulk in phosphatic guano or yellow sand being added, the whole becomes "Peruvian."

In August 1856, Congress passed an act for the encouragement and protection of Americans who should discover unclaimed guano deposits. In about two years and a half after the passage of this law, forty guano islands have been discovered in the Pacific Ocean, near the equator, and taken possession of by Americans. Of these, two—Baker's Island and Jarvis's Island—have been claimed by the American Guano Company; and Howland's, Malden's, and a host of others, by the United States Guano Company. The quantity of guano on these several islands is doubtless very large, and good facilities exist at some for ships to obtain it. A number of safe harbors are said to have been found, but at some of the islands there is only a good lee. There are not many severe storms in that vicinity, but sometimes the roll of the Pacific, after a distant storm, is very powerful so much so about a year ago as to destroy an expensive wharf which one of the companies had built for the shipment of guano. The quantity of guano on Jarvis's and Baker's Islands is estimated by the Company at 2,500,000 tons—with how much justice we are not able to say. On the forty-six islands belonging to the United States Company, there are supposed to be 10,000,000 tons of good guano. We are informed that there have been brought:

By ship already arrived, some twenty, from islands discovered and taken possession of under the law of Congress. And it is said that Paul Goode, 22,000 tons
By ship now loading, on their way, and under charter, 12,000 tons
Total..... 34,000 tons

Our readers must remember that there is a vast difference between these "American" guanos and the "Peruvian" sort. The latter comes from a latitude where rain seldom falls, and hence the ammonia and nitrogenous (ammonia-making) ingredients of the bird-dung are not washed out, but remain for our use. So, likewise, do the soluble phosphates and other soluble matters. The "American" guanos, on the contrary, are found in a rainy region, and while the guano, when first deposited by the birds, was as good as that from the Clinches, the rains of ages have washed the more soluble portions into the ocean, and the residue contains only a small proportion of plant-food which is ready for immediate use by the plant. The great bulk of these washed guanos is phosphate of lime, a most valuable material. In one specimen examined by Prof. Johnson, there was found 83 per cent. of phosphate of lime, equivalent to no less than 38 per cent. of phosphoric acid; while there was only about three-fourths of 1 per cent. of ammonia. Such guano as this would be worth to the farmer about \$34 per ton. All that is sold as American guano is not good as this sample, for Prof. Johnson analyzed a specimen which had only 7.9 per cent. of phosphoric acid, and consisted chiefly of sulphate of lime, or common plaster.

Peruvian guano, on the other hand, contains an average of 15 per cent. of ammonia, of which about 9 per cent. will be "actual" ready for immediate use, and 6 per cent., "potential," derivable from the substances contained in the guano, and about the same proportion of phosphate of lime.

Peruvian guano is a fertilizer that often destroys the seed when carelessly applied; hence it should be well pulverized and mixed with twice its bulk of dry earth, coal-slues, plaster, or some similar powder, in order to insure equal distribution.

son with some of the "tricks of the trade," this fraud seems very innocent. Many a hundred tons of common dirt has been sold at three cents the pound in company with a small modicum of real guano, and under the guarantee of genuine guano bags. It is well to remark that the retailers of genuine guano are applied to for the empty bags, and one person of our acquaintance has been offered 12 to 15 cents apiece for them, or more than they cost when new. Each bag of Peruvian guano, when stored, is weighed and stamped thus: "Warned No. 1 Peruvian guano. Imported into the United States by Barril Bros., Agents for Consuls of the Peruvian Government." The weight is also marked on the bag, and there is no other mark whatever upon it beyond these. Let our readers remember it is fact, and they will need not be imposed upon by persons who advertise them as importers of Peruvian guano. Not a ton of guano is imported into this country, except by the Government's agents, and any bags stamped as "imported" by private individuals should be looked upon as swindling frauds.

Many persons suppose that they can tell true from false guano by the smell alone. In this matter, however, it is not at all safe to follow their noses; for if we take 100 lbs. of real Peruvian, add a little lime to it, a little carbonate of ammonia, and mix them with 1,900 lbs. of common yellow earth, there will be a greater odor of ammonia than from a ton of pure guano. Nor can we rely upon texture, although this is a common test applied by purchasers. As an instance, we quote from a lecture by J. C. Neatby, a celebrated English agricultural chemist. He says:

"Now I will exhibit here a few of these samples of counterfeit guano, for the way in which they are got up are really most curious. The composition of one of these is really like the phosphorite of New-Jersey and Estramadura, but like hard-baked pie-clay, on an island in lat. 18° 38' N., in 63° 30' E., midway between Anguilla and the Virgin Islands. The color of the "Sombrero" is very different from that of Peruvian or other unpeeled being a light drab so that it would seem a poor article to mix with Peruvian with intent to defraud. Various eminent chemists have pronounced it remarkably rich in phosphoric acid, is union with lime generally placing it as high as 80 per cent. Its peculiar mechanical texture is such that it would seem capable of speedy solution in the soil, and hence of rapid appropriation by the plant. Whether such is really the case we cannot say, for the guano has only been in market three years. It meets with peculiar favor with the large Southern firms, who mix Peruvian with phosphoric guano, and honestly sell the compound under its proper name. Since the island came into American possession, three years ago, the demand in this country for its guano de-pot has risen from 2,800 tons the first year to 20,000 the present year; and it is quite improbable that any more than this quantity could be annually supplied, because of there being no harbors and only two anchorages at buoys a fourth of a mile from shore. We learn that the force employed in mining and shipping the guano consists of 20 white men, 200 free negroes, and about a dozen foremen, under the direction of a superintendent and assistant. A chemist is also resident upon the island, employed to analyze all the guano shipped, and send some which do not contain 70 per cent. of phosphate of lime. Lieutenant Knox, formerly of the U. S. Navy, but now assistant superintendent at the island, has estimated its cubic contents of guano at 3,493,000 tons. The process of quarrying and blasting with gunpowder has to be resorted to to get out the guano and in lump it is brought to this country, when it is ground in a suitable mill before it is fit for use. The phosphate of lime should prove to be as soluble as it is claimed to be, this guano is a real acquisition; but whether it be so or not, time alone can demonstrate.

In fact, the sole reliable test of the value of guano or other commercial fertilizers is chemical analysis. The matter has really become of such national importance that special laws should be passed to protect consumers against fraud. Every one of these "special measures" should be bold with a guarantee that it contains so much ammonia, and as much of other ingredients, as are prescribed by the law. The argument in this section of Republican doctrine is that the people of the Territory may decide for themselves whether they will have Slavery or not, and that it is the province of the Supreme Court to decide whether they shall have it or not in seen to involve a palpable contradiction, and is therefore deemed ridiculous absurd. There are other reasons why it cannot be expected that public sentiment in the South should sit in favor of Mr. Douglass.

The argument here has measurably narrowed down to a comparison of the fidelity of the different candidates to the interests and requirements of Slavery. I will especially and briefly refer only to the argumentation of the supporters of Mr. Bell. They have represented this gentile as an adroit, and all who supporting are presumed to have accepted him in his behalf that it can have. The assumption that he can best represent the people of the South is, in my opinion, very culpable here. That Mr. Douglass is assailed and reviled is, in my opinion, the same spirit of denunciation and execration that characterized the movement in this section of Republican doctrine and leads to Douglass.

Mr. Douglass is, like his predecessor, a

POLITICAL INTELLIGENCE.

THE REPUBLICAN CANVASS.

The Hon. HENRY B. STANTON will speak for Lincoln, Hamlin, and the Good Cause, as follows:

At Albany.....	Saturday, Sept. 29.
At Utica.....	Monday, Oct. 1.
At Rochester.....	Tuesday, Oct. 2.
At Amsterdam.....	Wednesday, Oct. 3.
At Oneida Depot.....	Friday, Oct. 5.
Deposit.....	Wednesday, Oct. 10.
At Newburgh.....	Thursday, Oct. 12.
At Middletown.....	Friday, Oct. 13.
At Buffalo.....	Saturday, Oct. 14.

The Hon. CHARLES L. BEALE will likewise speak

At Canfield, Columbian Co..... Saturday, Sept. 29.

At Fort Ann..... Tuesday, Oct. 2.

At Saugerties Hill..... Wednesday, Oct. 3.

At Chittenango Warren Co..... Thursday, Oct. 4.

At Glen Falls..... Friday, Oct. 5.

At North Chatham..... Saturday, Oct. 6.

At Cohoes..... Tuesday, Oct. 9.

At Troy, Lewis Co..... Wednesday, Oct. 10.

At Greenport, Suffolk Co..... Thursday, Oct. 11.

At Elizabethtown..... Friday, Oct. 12.

At Utica..... Saturday, Oct. 13.

At Liverpool..... Monday, Oct. 14.

At Baldwinsville..... Tuesday, Oct. 15.

At Herkimer..... Wednesday, Oct. 16.

At Utica..... Thursday, Oct. 17.

At Utica..... Friday, Oct. 18.

At Danville..... Saturday, Oct. 19.

At Utica..... Sunday, Oct. 20.

At Utica..... Monday, Oct. 21.

At Utica..... Tuesday, Oct. 22.

At Utica..... Wednesday, Oct. 23.

At Utica..... Thursday, Oct. 24.

At Utica..... Friday, Oct. 25.

At Utica..... Saturday, Oct. 26.

At Utica..... Sunday, Oct. 27.

At Utica..... Monday, Oct. 28.

At Utica..... Tuesday, Oct. 29.

At Utica..... Wednesday, Oct. 30.

At Utica..... Thursday, Oct. 31.

At Utica..... Friday, Oct. 32.

At Utica..... Saturday, Oct. 33.

At Utica..... Sunday, Oct. 34.

At Utica..... Monday, Oct. 35.

At Utica..... Tuesday, Oct. 36.

At Utica..... Wednesday, Oct. 37.

At Utica.....